ABSTRACT

A method of reducing spatial noise in an image. Low-pass (smoothing) filters are calculated simultaneously from three successive image rows. Three blocks (m1, m2, m3) are associated with the three successive image rows, and the blocks are processed in row-major order. This implementation is applicable to both luminance and chrominance. The number of smoothing parameters is reduced to one. The technique is applicable to both luminance and chrominance. Directional mapping is used. Extension of the technique to spatial filtering using a 5x5 neighborhood (using five successive image rows) is described. Embodiments of the method using the MMX instruction set are described.